

**REMARKS**

Claims 1-5 have been cancelled, without prejudice.

New claims 6-7 also particularly point out and distinctly claim subject matter regarded as the invention.

The amendments here presented are made for the purposes of better defining the invention, rather than to overcome the rejections for patentability. Support for the amendments herein presented can be found in the specification and claims as filed. No new matter has been introduced as a result of the amendments. Reconsideration and allowance is respectfully requested in view of the amendments and the following remarks.

**The 35 U.S.C. § 112 Rejection**

Claim 5 stands rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. This objection is respectfully traversed.

In the Office Action at paper number 2, third paragraph, the Office Action asserts that the recited properties are indefinite in not specifying a particular film thickness since said properties are dependent on said film thickness. For example, the thinner the film, the lower haze value. Applicant respectfully disagrees with the assertions in the Office Action.

There are two separate requirements set forth in 35 U.S.C. § 112, second paragraph. (A) the claims must set forth the subject matter that applicants regard as their invention; and (B) the claims must particularly point out and distinctly define the meets and bounds of the subject matter that will be protected by the patent grant. The first requirement is dependent upon what the applicants for a patent regard as their invention. The second requirement is evaluated in the context of whether the scope of the claims is clear to a hypothetical person possessing the ordinary level of skill in the pertinent art. If

a rejection is based on 35 U.S.C. § 112, second paragraph, the examiner should further explain whether the rejection is based on indefiniteness or on the failure to claim what applicants regard as their invention. *Ex parte Ionescu*, 222 USPQ 537 (Bd. App. 1984).

A claim may not be rejected solely because of the type of language used to define the subject matter for which patent protection is sought. *In re Swunehart*, 160 USPQ 226 (CCPA 1971).

The elements of Claim 5 are clearly taught in the specification at page 3, third and fourth paragraphs, page 4, fourth paragraph and the paragraph bridging pages 4 and 5, page 7, first paragraph, at page 13, last paragraph and at page 14 the first and second paragraphs. The disclosure provides sufficient teaching such that the scope of the claim is clear to one possessing ordinary skill in the art.

Withdrawal of the 35 U.S.C. § 112, second paragraph, rejection is respectfully requested.

#### The 35 U.S.C. § 102 Rejection

Claims 4 and 5 stand rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Yukinobu et al (U.S. Patent No. 5,411,792). This rejection is respectfully traversed.

The Office Action asserts Yukinobu et al teach a transparent conductive substrate having the instant mesh-shaped openings (fig. 3 and screen printing at col. 6, lines 15-22) and a light transmittance, a haze value and a surface resistivity (tables 2 and 6). Said transparent conductive substrate comprises a resin and ITO particle having a particle size of 0.03  $\mu\text{m}$  (30 nm) (table 1 and col. 6, lines 15-22). Solvents would be absent in said transparent conductive substrate. Also, an invention in a product-by-process claim is a product, not a process. See *In re Brown*, 459 F2d 531, 173 USPQ 685 (CCPA 1972) and *In re Thorpe*, 777 F2d 695, 697, 227 USPQ 964 (Fed. Cir. 1985). The Office Action asserts that the instant invention lacks novelty. Applicant respectfully disagrees with the assertion in the Office Action.

The claims 4 and 5 have been canceled, thus the rejection is now moot.

Claims 1-5 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Yukinobu et al (U.S. Patent No. 6,261,479).

The Office Action asserts that Yukinobu et al teach the instant transparent conductive film of claim 5 in comparative example 2 and table 1. Also, examples 5, 6 and 11 of said table 1 meet the instant claim 4. Said film inherently possesses mesh-shaped openings since the composition of said film of Yukinobu et al is same as in the instant invention, a resin and ITO particle having a particle size of 0.03  $\mu\text{m}$  (30 nm). Example 5 teaches the use of colloidal dispersion of example 1 wherein the use of ethanol and diacetone alcohol (col. 14, line 5) which meet the instant solvent is taught. Conductive fine oxide particles having a particle size of 1 nm to 100 nm which encompass the instant particles of claim 3 are taught at col. 7, lines 39-41. Applicant respectfully disagrees with the assertions in the Office Action.

Claims 1-5 have been canceled, thus the rejection is now moot.

Additionally to anticipate a claim under 35 U.S.C. § 102, a single source must contain all of the elements of the claim. *Lewmar Marine Inc. v. Barient, Inc.*, 827 F.2d 744, 747, 3 U.S.P.Q.2d 1766, 1768 (Fed. Cir. 1987), cert. denied, 484 U.S. 1007 (1988). Moreover, the single source must disclose all of the claimed elements "arranged as in the claim." *Structural Rubber Prods. Co. v. Park Rubber Co.*, 749 F.2d 707, 716, 223 U.S.P.Q. 1264, 1271 (Fed. Cir. 1984). To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 180 USPQ 580 (CCPA 1974). All words in a claim must be considered in judging the patentability of that claim against the prior art. *In re Wilson*, 165 USPQ 494, 496 (CCPA 1970).

The Yukinobu et al reference fails to disclose each and every claimed element as claimed in claim 6. The Yukinobu et al reference fails to disclose a paint for forming a transparent conductive thin film comprising a conductive oxide powder comprising a primary granular diameter of no greater than about 100 nm and a secondary granular diameter of from about 101 to about 150 nm, an easily dispersible low-boiling point solvent of said conductive oxide powder, a difficultly dispersible high-boiling point solvent of said conductive oxide powder; and a binder.

Claims 1, 2, 4 and 5 stand rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Sato et al (U.S. Patent No. 5,204,177).

The Office Action asserts that Sato et al teach the instant transparent conductive coating composition and a film thereof in example 15, col. 9, lines 59-61 and table 2. Applicant respectfully disagrees with the assertions in the Office Action.

Claims 1-5 have been canceled, thus the rejection is now moot.

Additionally to anticipate a claim under 35 U.S.C. § 102, a single source must contain all of the elements of the claim. *Lewmar Marine Inc. v. Barient, Inc.*, 827 F.2d 744, 747, 3 U.S.P.Q.2d 1766, 1768 (Fed. Cir. 1987), cert. denied, 484 U.S. 1007 (1988). Moreover, the single source must disclose all of the claimed elements “arranged as in the claim.” *Structural Rubber Prods. Co. v. Park Rubber Co.*, 749 F.2d 707, 716, 223 U.S.P.Q. 1264, 1271 (Fed. Cir. 1984). To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 180 USPQ 580 (CCPA 1974). All words in a claim must be considered in judging the patentability of that claim against the prior art. *In re Wilson*, 165 USPQ 494, 496 (CCPA 1970).

The Sato et al reference fails to disclose each and every claimed element as claimed in claim 6. The Sato et al reference fails to disclose a paint for forming a transparent conductive thin film comprising a conductive oxide powder comprising a primary granular diameter of no greater than about 100 nm and a secondary granular

diameter of from about 101 to about 150 nm, an easily dispersible low-boiling point solvent of said conductive oxide powder, a difficultly dispersible high-boiling point solvent of said conductive oxide powder; and a binder.

Claims 1, 2, 4 and 5 stand rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Murouchi et al (U.S. Patent No. 5,504,133).

The Office Action asserts that Murouchi et al teach the transparent conductive coating composition comprising a polymer, ITO particles having a particle size of 0.05  $\mu\text{m}$  (50 nm) and a film thereof in abstract and table 1 and at col. 3, lines 10-29 and col. 8, lines 53-55. The instant solvents are taught at col. 3, lines 30-42. Applicant respectfully disagrees with the assertions in the Office Action.

Claims 1-5 have been canceled, thus the rejection is now moot.

Additionally to anticipate a claim under 35 U.S.C. § 102, a single source must contain all of the elements of the claim. *Lewmar Marine Inc. v. Barient, Inc.*, 827 F.2d 744, 747, 3 U.S.P.Q.2d 1766, 1768 (Fed. Cir. 1987), cert. denied, 484 U.S. 1007 (1988). Moreover, the single source must disclose all of the claimed elements “arranged as in the claim.” *Structural Rubber Prods. Co. v. Park Rubber Co.*, 749 F.2d 707, 716, 223 U.S.P.Q. 1264, 1271 (Fed. Cir. 1984). To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 180 USPQ 580 (CCPA 1974). All words in a claim must be considered in judging the patentability of that claim against the prior art. *In re Wilson*, 165 USPQ 494, 496 (CCPA 1970).

The Murouchi et al reference fails to disclose each and every claimed element as claimed in claim 6. The Murouchi et al reference fails to disclose a paint for forming a transparent conductive thin film comprising a conductive oxide powder comprising a primary granular diameter of no greater than about 100 nm and a secondary granular diameter of from about 101 to about 150 nm, an easily dispersible low-boiling point

solvent of said conductive oxide powder, a difficultly dispersible high-boiling point solvent of said conductive oxide powder; and a binder.

Claims 1, 2, 4 and 5 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Nishihara et al (U.S. Patent No. 5,518,810).

The Office Action asserts that Nishihara et al teach the instant transparent conductive coating composition and a film thereof in example 5 wherein the use of tetrahydrofuran and dimethylformamide is seen. The instant light transmissivity, ITO particle size and surface resistivity are taught at col. 9, lines 38-64 which inherently yields the instant haze value. Applicant respectfully disagrees with the assertions in the Office Action.

Claims 1-5 have been canceled, thus the rejection is now moot.

Additionally to anticipate a claim under 35 U.S.C. § 102, a single source must contain all of the elements of the claim. *Lewmar Marine Inc. v. Barient, Inc.*, 827 F.2d 744, 747, 3 U.S.P.Q.2d 1766, 1768 (Fed. Cir. 1987), cert. denied, 484 U.S. 1007 (1988). Moreover, the single source must disclose all of the claimed elements “arranged as in the claim.” *Structural Rubber Prods. Co. v. Park Rubber Co.*, 749 F.2d 707, 716, 223 U.S.P.Q. 1264, 1271 (Fed. Cir. 1984). To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 180 USPQ 580 (CCPA 1974). All words in a claim must be considered in judging the patentability of that claim against the prior art. *In re Wilson*, 165 USPQ 494, 496 (CCPA 1970).

The Nishihara et al reference fails to disclose each and every claimed element as claimed in claim 6. The Nishihara et al reference fails to disclose a paint for forming a transparent conductive thin film comprising a conductive oxide powder comprising a primary granular diameter of no greater than about 100 nm and a secondary granular diameter of from about 101 to about 150 nm, an easily dispersible low-boiling

point solvent of said conductive oxide powder, a difficultly dispersible high-boiling point solvent of said conductive oxide powder; and a binder.

Claims 1, 2, 4 and 5 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Tamai et al (U.S. Patent No. 2002/0051879).

Tamai et al teach the instant transparent conductive coating composition and a film thereof in [0077] and table 1 wherein the use of mixed solvents is seen. Films having low haze values in table 1 inherently meet the instant light transmissivity. ATO particles having an average particle size of 20 nm ([0074]) also encompass particles having a size of below 10 nm. Other metal oxides [0034], and an average particle size of 5 to 50 nm [0035] which meets the invention are taught. Various solvents and combination thereof are taught at [0050]-[0051]. Applicant respectfully disagrees with the assertions in the Office Action.

Claims 1-5 have been canceled, thus the rejection is now moot.

Additionally to anticipate a claim under 35 U.S.C. § 102, a single source must contain all of the elements of the claim. *Lewmar Marine Inc. v. Barient, Inc.*, 827 F.2d 744, 747, 3 U.S.P.Q.2d 1766, 1768 (Fed. Cir. 1987), cert. denied, 484 U.S. 1007 (1988). Moreover, the single source must disclose all of the claimed elements "arranged as in the claim." *Structural Rubber Prods. Co. v. Park Rubber Co.*, 749 F.2d 707, 716, 223 U.S.P.Q. 1264, 1271 (Fed. Cir. 1984). To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 180 USPQ 580 (CCPA 1974). All words in a claim must be considered in judging the patentability of that claim against the prior art. *In re Wilson*, 165 USPQ 494, 496 (CCPA 1970).

The Tamai et al reference fails to disclose each and every claimed element as claimed in claim 6. The Tamai et al reference fails to disclose a paint for forming a

transparent conductive thin film comprising a conductive oxide powder comprising a primary granular diameter of no greater than about 100 nm and a secondary granular diameter of from about 101 to about 150 nm, an easily dispersible low-boiling point solvent of said conductive oxide powder, a difficultly dispersible high-boiling point solvent of said conductive oxide powder; and a binder.

Since the prior art reference fails to disclose each and every claimed element, then the prior art reference fails to anticipate the claimed invention and the prior art fails to render obvious the claimed invention. In view of the foregoing, it is respectfully requested that the rejection be withdrawn and it is respectfully asserted that the claims are now in condition for allowance.

#### The 35 U.S.C. § 103 Rejection

The examiner's position is that even a small amount, such as 0.01 wt.%, of a conductive oxide powder having a diameter of no greater than 100 nm would meet the instant invention absent a particular amount thereof. Also, the prior art teaching an average particle size of 30 nm, for example, would encompass particles having a size of 10 nm and 40 nm inherently since said average particle size includes various sizes, smaller or larger. Applicant respectfully disagrees with the assertions in the Office Action.

Claims 1-5 have been canceled, thus the rejection is now moot.

Additionally to establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 180 USPQ 580 (CCPA 1974). All words in a claim must be considered in judging the patentability of that claim against the prior art. *In re Wilson*, 165 USPQ 494, 496 (CCPA 1970).

The references fail to disclose each and every claimed element as claimed in claim 6. The references fail to disclose a paint for forming a transparent conductive thin film



comprising a conductive oxide powder comprising a primary granular diameter of no greater than about 100 nm and a secondary granular diameter of from about 101 to about 150 nm, an easily dispersible low-boiling point solvent of said conductive oxide powder, a difficultly dispersible high-boiling point solvent of said conductive oxide powder; and a binder.

In view of the foregoing, it is respectfully requested that the rejection be withdrawn and it is respectfully asserted that the claims are now in condition for allowance.

#### Dependent Claim

The argument and evidence set forth above is equally applicable here. Since the independent Claim 6 is allowable, then the dependent Claim 7 must also be allowable. If an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596 (Fed. Cir. 1988).

In view of the foregoing, it is respectfully requested that the rejection be withdrawn and it is respectfully asserted that the claims are now in condition for allowance.


Request for Allowance

It is believed that this Amendment places the above-identified patent application into condition for allowance. Early favorable consideration of this Amendment is earnestly solicited.

If, in the opinion of the Examiner, an interview would expedite the prosecution of this application, the Examiner is invited to call the undersigned attorney at the number indicated below.

Respectfully submitted,  
SIERRA PATENT GROUP, LTD.

Dated: Oct 20, 2003

  
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